

What is claimed is:

1. A multiple compartment dishwasher comprising:  
a housing;  
a first compartment for washing within the housing;  
a second compartment for washing within the housing;  
a plurality of dishwasher components each having a power load  
when activated;  
at least one of the plurality of dishwasher components  
operatively disposed within the first compartment;  
at least one of the plurality of dishwasher components  
operatively disposed within the second compartment; and  
a power limiting distribution control system operatively  
connected to each of the plurality of dishwasher  
components for managing distribution of power.
2. The dishwasher of claim 1 wherein the power limiting  
distribution control system includes an electrical isolation  
circuit operatively connected to one of the plurality of  
dishwasher components.
3. The dishwasher of claim 2 wherein the electrical  
isolation circuit includes an opto-coupler.
4. The dishwasher of claim 1 wherein the power limiting  
distribution system includes an intelligent control, the  
intelligent control operatively connected to each of the  
plurality of dishwasher components for managing distribution  
of power.
5. The dishwasher of claim 4 wherein the intelligent  
control is selected from the set comprising a digital logic  
circuit, a processor, a controller, a microcontroller, a  
plurality of microcontrollers, and an integrated circuit.

6. The dishwasher of claim 4 wherein the intelligent control includes a first compartment microcontroller operatively connected to at least one of the plurality of dishwasher components disposed within the first component.

7. The dishwasher of claim 6 wherein the intelligent control includes a second compartment microcontroller operatively connected to at least one of the plurality of dishwasher components disposed within the second compartment and a communications bus electrically connected to the first compartment microcontroller and the second compartment microcontroller.

8. The dishwasher of claim 7 further comprising a user interface controller electrically connected to the communications bus.

9. The dishwasher of claim 1 further comprising at least one current sensor electrically connected to the power limiting distribution control system for determining current draw.

10. A multiple compartment dishwasher comprising:  
a first dishwasher compartment adapted for independent washing;  
a second dishwasher compartment adapted for independent washing;  
a first plurality of electrical energy using dishwasher components associated with the first dishwasher compartment;

a second plurality of electrical energy using dishwasher components associated with the second dishwasher compartment;

an electrical control system operatively connected to the first plurality of electrical energy using dishwasher components and the second plurality of electrical energy using dishwasher compartments for managing distribution of power; and

the electrical control system adapted for providing simultaneous use of the plurality of dishwasher compartments.

11. The multiple compartment dishwasher of claim 10 further comprising a first electrical isolation circuit electrically connected to the electrical control system and at least one of the first plurality of electrical energy using dishwasher components.

12. The multiple compartment dishwasher of claim 11 further comprising a second electrical isolation circuit electrically connected to the electrical control system and at least one of the second plurality of electrical energy using dishwasher components.

13. The multiple compartment dishwasher of claim 10 wherein the electrical control system includes a power management controller operatively connected to the first plurality of electrical energy using dishwasher components and the second plurality of electrical energy using dishwasher components.

14. The multiple compartment dishwasher of claim 13 further comprising a user interface controller operatively connected to the power management controller.

15. The multiple compartment dishwasher of claim 10 wherein the electrical control system includes a first controller operatively connected to the first plurality of electrical energy using dishwasher components and a second controller operatively connected to the second plurality of electrical energy using dishwasher compartments.

16. The multiple compartment dishwasher of claim 15 further comprising a user interface controller operatively connected to the first controller and the second controller.

17. The multiple compartment dishwasher of claim 10 wherein the electrical control system includes a digital logic circuit for preventing simultaneous use of dishwasher components.